

ABSTRACT

Wireless communication networks for monitoring and controlling a plurality of remote devices are provided. Briefly, one embodiment of a wireless communication network may comprise a plurality of wireless transceivers having unique identifiers. Each of the plurality of wireless transceivers may be configured to receive a sensor data signal from one of the plurality of remote devices and transmit an original data message using a predefined wireless communication protocol. The original data message may comprise the corresponding unique identifier and sensor data signal. Each of the plurality of wireless transceivers may be configured to receive the original data message transmitted by one of the other wireless transceivers and transmit a repeated data message using the predefined communication protocol. The repeated data message may include the sensor data signal and the corresponding unique identifier. Furthermore, at least one of the plurality of wireless transceivers may be further configured to provide the original data messages and the repeated data messages to a site controller connected to a wide area network. The site controller may be configured to manage communications between the wireless communication network and a host computer connected to the wide area network.